

REPORTS OF THE SECTIONS.

MINERALOGICAL AND GEOLOGICAL SECTION.

The Section has this year kept up its meetings and field excursions even more zealously than last year, with about double the number of communications, one-third larger attendance on the meetings, one-half more on the excursions, and an increase of more than one-quarter in membership.

There have been nine meetings, with an average attendance of over 11. Communications were made by Miss Emma Walter, on old stream-beds; by B. S. Lyman, on the immense time indicated by erosion; by Prof. B. L. Miller, on graphite occurring in Chester County, Pa.; by B. S. Lyman, on the Bechtel graphite mine, near Boyerstown, Berks County, Pennsylvania; by Miss Mary S. Holmes, on the Virginia Natural Bridge; by B. S. Lyman, on topography an aid to geology; by Miss Emma Walter, on clay near Saylorsburg, Monroe County, Pennsylvania; by Mr. F. J. Keeley, on the trap of Cape Ann, Massachusetts; by Miss Mary S. Holmes, on some problems suggested by the excursion along the Perkiomen; by Mr. T. Chalkley Palmer, on serpentines of Delaware County, Pennsylvania; by Mr. F. J. Keeley, on serpentines under the microscope; and about 20 shorter communications, besides various discussions.

There were 7 field excursions, with an average attendance of 43. The excursions visited: 1. The crystalline rocks and their minerals, particularly kaolin, between Hockessin, Delaware, and Kennett Square, Chester County, Pennsylvania; 2. The crystalline rocks near Glen Mills and Lenni, on Chester Creek, and at Mineral Hill, Delaware County, Pennsylvania; 3. The crystalline rocks near Avondale, Strath-Haven, Rose Valley and Media, Delaware County, Pennsylvania; 4. Portions of the New Red Perkasio shales and Pottstown shales and trap, from Lodel Creek to Spring Mountain, near the Perkiomen, and Schwenksville, Montgomery County, Pennsylvania; 5. Portions of the New Red Norristown shales and Gwynedd shales, and some of the gneiss southward, between Noble Station and Doylestown; 6. The crystalline rocks near Newtown Square, Delaware County, Pennsylvania; 7. The crystalline rocks between Newtown Square and Media, Delaware County, Pennsylvania.

The membership of the Section has increased by ten in all, namely, seven contributors and three members of the Academy, one of whom became a member through his interest in the Section. The Section

now contains 27 members of the Academy and 21 contributors, or 48 in all.

The following officers of the Section have been elected for the year 1905:

<i>Director</i> ,	Benjamin Smith Lyman.
<i>Vice-Director</i> ,	George Vaux, Jr.
<i>Recorder and Secretary</i> ,	Miss Mary S. Holmes.
<i>Treasurer</i> ,	Miss Emma Walter.
<i>Conservator</i> ,	Frank J. Keeley.

Respectfully submitted by order of the Section,

BENJ. SMITH LYMAN,
Director.

THE BIOLOGICAL AND MICROSCOPICAL SECTION.

The numerical strength of the Section is the same as that of last year, two members having withdrawn and two having been admitted.

The interest in the regular sessions has been increased by the discussions at the informal meetings which have formed a pleasant feature of the year's work. Numerous communications have been made, among which may be especially mentioned those of Mr. F. J. Keeley, on various accessories of microscopic manipulation; by Mr. T. C. Palmer on *Trachelomonas*; by Dr. D. E. Owen on dredgings in Saco Bay, and by Mr. Hugo Bilgram on *Myxomycetes*. Every member present has made an effort to offer at each meeting some object or subject which, if not new, has at least stimulated the work of others. A special topic which has occupied the attention of the Section is that of the microscopic structure of rocks.

The Conservator reports that the instruments belonging to the Section are in good working order, and the following additions have been made during the past year: One Zentmayer Portable Histological Stand, one Dissecting Microscope, one Beck Microscope Lamp, one Aeme Microscope Lamp, one Balance, two large Slide Cabinets with Drawers, four small Slide Cabinets with Trays, some miscellaneous accessories and over 500 mounted slides, all presented by Mrs. Charles Shaeffer. One hundred and fifty-eight slides, prepared by L. Woolman, were presented by Mr. F. J. Keeley.

One Tolles $\frac{1}{10}$ -inch Objective was purchased.

The officers elected for the following year are as follows:

<i>Director</i> ,	J. Cheston Morris, M.D.
<i>Vice-Director</i> ,	T. Chalkley Palmer.
<i>Conservator</i> ,	F. J. Keeley.
<i>Recorder</i> ,	C. S. Boyer.
<i>Corresponding Secretary</i> ,	S. L. Sehumo.
<i>Treasurer</i> ,	Thomas S. Stewart, M.D.

CHARLES S. BOYER,
Recorder.

THE ENTOMOLOGICAL SECTION.

Ten meetings were held with an average attendance of twelve persons. The communications made were of scientific interest, and have been published in the *Entomological News and Proceedings of the Entomological Section*. This journal has been continued and Volume XV completed with 352 pages and 20 plates. One hundred and five book or Schmitt boxes have been purchased, and three of the new tin pest-proof cases to hold them. Rearrangements have been made of portions of the collections and new material added by gift, purchase and exchange, to the number of over 7,000 specimens. The collection of Orthoptera has been increased by the presentation of nearly 500 specimens, the gift of Mr. Morgan Hebard. This order has also been enriched by the reception of over 700 specimens from Dr. Henri de Saussure, containing many genera and species new to the collection.

Valuable additions have been made to the cabinets by purchase, including 766 Orthoptera from Japan and the Loo Choo Islands; 274 Orthoptera from the Philippines; 1,000 Hymenoptera from Mexico; 342 Chilean Orthoptera, and 2,000 insects from Georgia, collected for the Academy by Mr. J. A. G. Rehn.

Three associates have been elected, and at the annual meeting, held December 22, the following persons were elected officers to serve for 1905:

<i>Director</i> ,	Philip Laurent.
<i>Vice-Director</i> ,	H. W. Wenzel.
<i>Treasurer</i> ,	E. T. Cresson.
<i>Recorder and Conservator</i> ,	Henry Skinner.
<i>Secretary</i> ,	Frank Haimbach.
<i>Publication Committee</i> ,	C. W. Johnson, J. H. Ridings.

HENRY SKINNER,
Recorder.

THE BOTANICAL SECTION.

During the year much progress has been made in the arrangement of the Herbarium, the collections now being in better condition and more readily accessible than ever before.

The erection of new cases in the centre of the south herbarium room has resulted in the rearrangement of all the flowering plants, thus relieving the congested condition of many of the cases.

The large case containing seeds, etc., formerly in the south room, has been moved to the north gallery room, where it is readily accessible to any one desiring to study its contents.

Over 18,000 sheets have been added to the collection during the year, acquired principally by purchase and exchange, although many liberal donations have been received.

These include the herbarium of the late Dr. Charles Schaeffer, containing his collections for many seasons in the British Columbia region, presented by Mrs. Mary S. Schaeffer; and the gift by Dr. Ida A. Keller of her entire herbarium, including a number of plants from Europe.

Smaller collections were received from Mr. Charles S. Williamson, from the eastern United States; Mr. Benjamin H. Smith, from south Florida; the United States National Museum and Messrs. Witmer Stone, E. G. Vanatta, Dr. Campbell E. Waters, Edward Potts, Henry S. Conard, and the Conservator. These are noted in detail in the *Additions to the Museum*.

The Section has purchased a collection of 178 sheets of Washington plants from Mr. Henry S. Conard, and 365 sheets of California plants from Mr. A. A. Heller, the collections of the past season, containing many novelties.

The important collection made by Mr. Herbert H. Smith in the Santa Marta region of Colombia has been purchased by the Academy, and numbers 2,500 sheets; also the West African collections of Dr. Pritzel, numbering 1,776 sheets, and the herbarium of Alexander MacElwee, acquired through purchase and exchange, numbering approximately 10,000 sheets, a considerable proportion of which are mounted.

The Academy's expeditions added 450 sheets, as follows:

Thomasville, Georgia, 50 sheets, collected by Mr. J. A. G. Rehn; Cuba and southern Florida, 125 and 25 respectively, collected by Dr. H. A. Pilsbry, and from the Florida keys, 250 sheets, collected by the Conservator.

All the specimens received have been poisoned, and a considerable number mounted and distributed through the Herbarium.

The series of field excursions conducted during April and early May by the Conservator were largely attended.

Much assistance was rendered during the year to students and visiting botanists desiring to consult the collections.

The Philadelphia Botanical Club has continued to hold its meetings during the year, its members having contributed over 400 sheets to the local Herbarium, which collection has been placed in excellent condition through the unremitting labors of Mr. Samuel S. Van Pelt.

At the meeting of the Section held December 13, 1904, the following were elected as officers for the ensuing year:

<i>Director</i> ,	Mr. Benjamin H. Smith.
<i>Vice-Director</i> ,	Mr. Joseph Crawford.
<i>Recorder</i> ,	Dr. Ida A. Keller.
<i>Secretary</i> ,	Mr. John T. Pennypacker.
<i>Treasurer and Conservator</i> ,	Stewardson Brown.

Respectfully submitted,

STEWARDSON BROWN,
Conservator.

THE ORNITHOLOGICAL SECTION.

The ornithological collections of the Academy were never in better condition nor more accessible to the student than at present.

During the past year three additional exhibition cases have been erected in the new gallery, permitting the transfer of the entire series of Raptorial birds, as well as the Pigeons. The rearrangement and labelling of the former group has been completed and many duplicate specimens not required for exhibition have been arranged in the study series. At the present time only the Passerine and Picarian birds remain in the old building, and the majority of these will be transferred next year.

Thirteen additional tin storage cases and ten wooden cases have been provided for the accommodation of the study collection, greatly facilitating the arrangement of many groups, especially the birds of prey, and providing needed space for the numerous accessions.

The Conservator has examined practically all the large bird skins during the year, and carefully rearranged the old unmounted material which has been listed to facilitate consultation.

Many important additions have been made to the collection, fore-

most among which is a series of 360 Philippine birds purchased by the Academy; a handsome collection of mounted Humming-birds, the gift of Calvin Pardee, Esq., and collections from the West Indies, Colorado and California, presented respectively by Dr. J. Percy Moore, Robert T. Young and W. O. Emerson.

The Delaware Valley Ornithological Club has continued to hold its meetings at the Academy, and has done much to stimulate ornithological study. The collections have been largely consulted during the year, and considerable assistance has been rendered to visiting ornithologists.

The Conservator would acknowledge valuable assistance in the care of the collections to Mr. Paul L. Lorrilliere.

At the annual meeting of the Section, held December 19, 1904, the following officers were elected:

<i>Director,</i>	. . . . .	Spencer Trotter, M.D.
<i>Vice-Director,</i>	. . . . .	George S. Morris.
<i>Secretary,</i>	. . . . .	William A. Shryock.
<i>Recorder,</i>	. . . . .	Stewardson Brown.
<i>Treasurer and Conservator,</i>	. . . . .	Witmer Stone.

WITMER STONE,
Conservator.

The annual election of Officers, Councillors and Members of the Committee on Accounts to serve during 1905 was held with the following result:

PRESIDENT,	. . . . .	Samuel G. Dixon, M.D.
VICE-PRESIDENTS,	. . . . .	Arthur Erwin Brown, E. G. Conklin, Ph.D.
RECORDING SECRETARY,	. . . . .	Edward J. Nolan, M.D.
CORRESPONDING SECRETARY,	. . . . .	J. Percy Moore, Ph.D.
TREASURER,	. . . . .	George Vaux, Jr.
LIBRARIAN,	. . . . .	Edward J. Nolan, M.D.
CURATORS,	. . . . .	Arthur Erwin Brown, Samuel G. Dixon, M.D. Henry A. Pilsbry, Sc.D. William S. Vaux, Jr.

COUNCILLORS TO SERVE THREE YEARS,	Thomas H. Fenton, M.D. Edwin S. Dixon, John Cadwalader, William Sellers.
COMMITTEE ON ACCOUNTS,	Charles Morris, Samuel N. Rhoads, Dr. C. Newlin Peirce, John G. Rothermell, Howard Crawley.
COUNCILLOR TO SERVE FOR UNEXPIRED TERM OF TWO YEARS,	Frederick Prime.

COUNCIL FOR 1905.

Ex-officio.—Samuel G. Dixon, M.D., Edwin G. Conklin, Ph.D., Arthur Erwin Brown, Edward J. Nolan, M.D., J. Percy Moore, Ph.D., George Vaux, Jr., Henry A. Pilsbry, Sc.D., and William S. Vaux, Jr.

To serve Three Years.—Thomas Fenton, M.D., Edwin S. Dixon, John Cadwalader and William Sellers.

To serve Two Years.—Dr. C. Newlin Peirce, Philip P. Calvert, Ph.D., Thomas Biddle, M.D., and Frederick Prime.

To serve One Year.—Thomas A. Robinson, Charles B. Penrose, M.D., Charles Morris, Isaac J. Wistar.

CURATOR OF MOLLUSCA,	Henry A. Pilsbry, Sc.D.
ASSISTANT LIBRARIAN,	William J. Fox.
ASSISTANTS TO THE CURATORS,	Witmer Stone, Henry Skinner, M.D., Stewardson Brown, J. Percy Moore, Ph.D., Edward G. Vanatta, Henry W. Fowler, J. A. G. Rehn, H. Newell Wardle.
TAXIDERMIST,	David McCadden.
<i>Jessup Fund Students,</i>	H. Newell Wardle, J. A. G. Rehn, Paul L. Lorrilliere.